



ЕВРОПЕЙСКИ СЪЮЗ
ЕВРОПЕЙСКИ ФОНД ЗА РЕГИОНАЛНО РАЗВИТИЕ
ИНВЕСТИРАМЕ ВЪВ ВАШЕТО БЪДЕЩЕ!



БЪЛГАРСКО ПРАВИТЕЛСТВО



MODULAR THEORETICAL AND PRACTICAL PROGRAMME

for

EXTRACURRICULAR TRAINING OF STUDENTS AND TEACHERS

IN CASES OFFOREST FIRES

Montana, 2020

www.interregobg.eu

I. GENERAL PRESENTATION OF THE PROGRAMME

This programme has been prepared under the project "Security for our children", Grant Agreement №118737 / 03.09.2019, project System Code: ROBG - 461, funded by the Interreg VA Romania-Bulgaria Program, implemented by the Agency for Regional Development and Business Center 2000", Montana.

It is based on the findings of in-depth studies on the project in the field of prevention and management of risk of disasters, accidents and catastrophes, especially in floods and fires in the districts of Montana, Vidin and Dolj, as well as the results of the International meeting.

The programme includes educational contents, the mastery of which aims to teach students a system of knowledge about forest fires, as well as methods for combating them. The purpose of the training is by acquiring basic knowledge and acquiring skills for their application, for the students to gain professional competencies for disaster risk prevention and risk management at school in case of forest fires.

The programme aims to provide basic knowledge and information on civil protection in forest fires and focuses on all its aspects, such as prevention, disaster response, and addresses various institutional, social and educational issues.

Practically forest fires can occur anywhere. The summer season is especially dangerous, when hundreds of tourists make excursions in nature. All Bulgarian mountains are potentially endangered during periods of prolonged drought. However, fires can occur not only in the mountains. Every year, the authorities warn farmers to take measures in the heat when working outdoors.

Particular attention should be paid to nature parks and reserves, as there are such throughout the country. A fire there can destroy the natural habitats of flora and fauna that nature has created for millennia. Under national law, human intervention in such areas is prohibited, so the potential restoration of affected reserves and protected areas will be left in the hands of nature. During the summer season, when prolonged droughts occur, the territory of almost the entire country is potentially threatened by fires.

Fire is an uncontrolled burning that threatens human life and health, material values or the natural environment. Forest fires are one of the most terrible natural disasters for the eco-climate. These are often uncontrollable and extremely dangerous due to their vastness. Small-scale fires in forestry and agricultural sites are of local character. Uncontrolled in time, local fires can grow into large ones and become mass.

Forest fires spread quickly over large surfaces in rugged areas and hard-to-reach areas for firefighting equipment. Typical of forest fires is that the fire front often changes its direction due to wind and turbulent air currents in case of fire, their rapid growth over large areas with vortices and sparks over long distances and the formation of new fires, which creates a real danger for the lives of firefighting

teams and animals. The main causes of forest and field fires are climate change, natural disasters / thunderstorms with lightning / , human negligence or intent.

The difficulties in fighting forest fires stem from the following facts:

- they occur in hard-to-reach places;
- spread out at high speed;
- cover a large area;
- require a large resource of people and equipment for liquidation.

In the event of a fire, the situation may be:

- complex - long, large-scale, high-intensity fires, endangered and isolated settlements, difficult-to-access terrains, high average daily temperatures, low atmospheric humidity;
- severe - progressively deteriorating conditions, affected settlements - population, residential and public buildings; sites of the national economy.

Significant material and environmental damage, with the loss of forest areas, can result from forest fires. Occurring on terrains that prevent their timely control and elimination, forest fires can grow into mass ones. In itself, such a fire cannot be considered a type of "natural disaster", but occurred on inaccessible or isolated semi-mountainous or mountainous areas, and accompanied by adverse weather conditions - strong winds and prolonged drought, and growing they can cover large areas and to acquire a scale that classifies it as a "natural disaster".

Forest fire training is a type of social learning and should be saturated with activities of an intellectual and practical nature, and the dominant form should be practical exercise. This will ensure, as a result, the dominance of skills over theoretical knowledge, because the protection of life and health requires above all an active-practical attitude, self-control and responsibility to comply with regulatory requirements and strive to improve protective reactions. Students are not only seen as a subject of care, but also as a subject involved in the school and family response to disasters. Students shall acquire knowledge about volunteering and the principles of volunteering, the strategic goal, operational goals, objectives and expected results of youth volunteering. They will form skills for strengthening the initiative in the school community for volunteering development among students for participation in creative projects of the school community, for participation in socially useful and socially significant activities.

Through appropriate and timely information and preparation, anyone potentially at risk of forest fires could take precautions and significantly reduce damage.

The programme is implemented within 20 lessons, which include training in theory and practical classes, in compliance with the didactic requirement at the beginning of training to acquire knowledge that will serve as a theoretical basis for the acquisition of skills, attitudes and behavior.

The programme (educational content) is developed on a modular basis in 4 modules, which include objectives, a certain minimum number of teaching classes for theoretical and practical training, sample training topics and expected results. The programme is applicable for training in extracurricular forms and for training of voluntary formations of students.

Thesis of the educational contents

Module I: Legislative requirements for disaster risk prevention and risk management in schools in the events of forest fires.

Training objectives under the module:

1. Students shall acquire knowledge of the national legislation for forest fires risk management, for the planning and reduction of the risk of disasters at national, regional, municipal and institutional level;
2. Acquisition of competencies regarding the legal requirements for disaster risk prevention and risk management in schools;
3. Acquisition of competencies - knowledge and skills in evacuation from a building and for self-defense in compliance with the basic rules of conduct in case of forest fires;
4. Route and places for evacuation in case of a specific disaster or accident;
5. Conducting practical training for evacuation according to the evacuation plan of the building.

Thematic (topic) plan

№	Name of the topics	Number of hours	
		Theory	practice
1	Legislative requirements for disaster risk prevention and school risk management in case of forest fires: Disaster Protection Act	2	0
1.1.	Regulations for the structure and activity of the Ministry of Interior		
1.2.	The Disaster Risk Reduction Strategy 2014-2020.		
1.3.	The National Disaster Protection Program 2014-2018		
1.4.	Draft of the Ministry of Education and Science from 2015		
1.5.	for "Instruction for conducting training for protection in case of disasters and for providing first pre-medical aid in the system of public education".		
1.6.	Ordinance № 13 of 21.09.2016 on civic, health, environmental and intercultural education.		
1.7.	Legislative requirements for disaster risk prevention and risk management in schools: • state educational standard for the training for protection in case of disasters and for rendering first pre-		

	<p>medical aid in the system of pre-school and school education;</p> <ul style="list-style-type: none"> requirements for disaster protection training in the system of pre-school and school education, approved by the Minister of Education and Science after coordination with the Minister of Interior. 		
2	Practical training for evacuation		
2.1.	Training of students - "Security Assistants".		
2.2.	What do we need to know about evacuation from a building?		
2.3.	<ul style="list-style-type: none"> Acquaintance with evacuation scheme (markings, plan, route scheme, signals, signs, markings for removal from the building) <p>Conducting a practical exercise for actions in forest fires:</p> <ul style="list-style-type: none"> preliminary preparation; the rules in case of real danger of forest fires; single European emergency number - content of the call on 112 (in case of disaster). Rules for the use of individual means of protection. 	0	2

Expected results:

1. Acquired basic knowledge of regulations for disaster risk prevention and risk management in schools in case of forest fires;
2. Knowledge on the European and national organizations for disaster risk prevention, the obligations and responsibilities of the institutions to society;
3. Knowledge on the types of signals for alerting the population in case of disaster, as well as other ways to warn the population;
4. They shall be able to orient themselves according to the signs and the scheme of the route for removal from the building;
5. They shall act according to the rules for fast and safe evacuation to the collection points (safety places);
6. They shall know and apply verbal and non-verbal communication techniques to overcome stress, panic, tension, fear, etc.;
7. Acquired behavioral models for effective response to risk situations;
8. They shall undertake independent actions for informing on emergency phone number 112 for rendering assistance in case of emergency;
9. They shall be able to distinguish between right and wrong actions in protection against forest fires.

Module II: Available resources, constraints and opportunities for disaster risk prevention and risk management in case of forest fires.

Training objectives under the module:

1. Students shall get acquainted with the nature and potential of forest fires;
2. Acquisition of knowledge about the types of forest fires according to the manner, causes and nature of manifestation, the danger of fires in forest areas, methods for fighting forest fires;
3. To get acquainted with Ordinance № 8 of 11 May 2012 on the terms and conditions for protection of forest areas from fires.
4. Acquisition of competencies regarding the dangers of forest fires for forest territories, game, people and their property;
5. Building skills for safe behaviour and response in crisis situations;
6. Drawing up a family plan;
7. Completion of a family kit for rapid disaster response;
8. Skills to navigate to the safest place in the building, the area, the region.

Thematic(topic) plan

№	Name of the topics	Number of hours	
		theory	practice
1	Forests fires 1.1. Essence of forest fires; 1.2. Elements and types; 1.3. Causes of forest fires; 1.4. Danger of fires in forest areas; 1.5. Damage from forest fires; 1.6. Fighting forest fires.	2	0
2	Ordinance № 8 of 11 May 2012 on the terms and conditions for protection of forest areas from fires 2.1. Forest protection organization; 2.2. Annual events for protection of forests from fires; 2.3. The measures for implementation under the envisaged Forest Management Projects or Forest Management Plans FMP / FMPL / for the respective year; 2.4. Fire-fighting events, measures and requirements for protection of forest territories from fires.	2	0
3	Practical training: 3.1. Natural disasters and response in extreme situations Presentation of real dangers that can cause forest fires 3.2. (<i>presentations, video, photos</i>) Elaboration of a map for probable natural disasters in the region. 3.3. Preparation of a risk matrix with a description of; 1. Danger; 3.4. 2. Probability of danger (0 low - 5 high); 3. Severity of impact (0 low - 5 high); 4. Risk assessment (2 x 3);	0	2

3.5.	<p>5.Priority. Disaster preparedness - drawing up a family plan for evacuation in case of forest fire; emergency kit with the most important things; family disaster response kit; backpack for disaster.</p>		
------	---	--	--

Expected results:

1. Acquired knowledge on the nature, elements and potential of forest fires;
2. Acquired knowledge on the types of forest fires depending on the place of their occurrence, the conditions under which they develop, the features of their characteristic elements;
3. Able to determine the types of damage and losses caused by forest fires;
4. Knowledge on the fire-fighting measures for fighting forest fires;
5. Able to make correct and safe independent decisions in the specific risk situation for self-defense and protection of others;
6. Assess the obligatory nature of the observance of the instructions of the competent bodies - General Directorate "Fire Safety and Protection of the Population" (FSPP GD) at the Ministry of Interior (Mol);
7. Formation of mental resilience and concentration of attention to deal with a situation in case of forest fire;
8. Draw up a sample family plan for evacuation in case of forest fire.

Module III: Good practices in EU countries, opportunities for creating future volunteering among young people.

Training objectives under the module:

1. Introduction to good practices in EU countries;
2. Development of a volunteer culture for the benefit of others and society
3. Development of volunteering in school or outside it
4. Promoting a healthy lifestyle and social inclusion.

Thematic (topic) plan

№	Name of the topics	Number of hours	
		Theory	Practice
1	Good practices in EU countries		
1.1.	Planning of preventive measures and measures, awareness, evacuation plan, preparations and emergency kit.	1	0
2	Opportunities to create a framework for volunteering among young people.		
2.1.	2006 Volunteering Draft Act.		
2.2.	Definition of volunteering and the principles of volunteering		

2.3. 2.4.	Development of youth volunteering, set in the National Youth Strategy - strategic goal, operational goals, tasks and expected results. Strengthening the initiative in the school community for the development of volunteering among young people: <ul style="list-style-type: none"> • the volunteering of the students, regulated in the regulations for the activity and part of the planning documents of the school; • formation of clubs (groups) for extracurricular activities for volunteering among students; • identification of topics and causes for volunteering of young people; • preparation of students, implementation of initiatives and analysis of the results in order to motivate them to participate in volunteering. 	1	0
3 3.1. 3.2.	3 Practical training Volunteers' club within the school Formation of a volunteers' club in a school: <ul style="list-style-type: none"> • guiding principles of the volunteer; • rights and obligations of the volunteer; <ul style="list-style-type: none"> • when and how the volunteer club works. Activities of the volunteer club: <ul style="list-style-type: none"> • preparation of sample regulations for the activity of the volunteer club; • documenting volunteer work; <ul style="list-style-type: none"> • identification of topics and causes for volunteering. 	0	3

Expected results:

1. Knowledge on the good practices of planning, information, evacuation in the EU countries.
2. Able to observe the rules for safe behavior in school and out of school in case of danger of forest fires and during forest fires;
3. They have established a model of behavior in a crisis situation;
4. Able to render assistance to the fire-fighting groups in rescue operations in case of forest fires;
5. Knowledge on the principles of volunteering;
6. Attracting students to participate in volunteer clubs in the school community;
7. Developed positive motivation of the students for prevention of social risks and solving of socially significant problems;
8. Expanded boundaries of the educational process.

Module IV: Practical complex lesson.

Training objectives under the module:

1. Getting acquainted with the behavioral reactions of people in case of forest fire and the appropriate actions for stress, panic and anxiety among children and students;
2. Getting acquainted with the necessary resources for first aid to the victim;
3. Acquisition of competencies for self-defense and rendering first aid to the victim, according to the condition and the injury.

Thematic (topic) plan

№	Name of the topics	Number of hours	
		Theory	Practice
1	First aid and support for victims of forest fires		
1.1.	Behavioral reactions in case of forest fire and first aid in case of forest fire;		
1.2.	Appropriate actions for stress, panic and anxiety among children and students.		
2	Behavior for self-defense and first pre-medical aid to victims of forest fires:		
2.1.	Algorithm of actions, personal safety and security of the incident area;		
2.2.	Assessment of vital signs and the condition of the victims;	0	5
2.3.	Providing self-help and mutual assistance in case of a forest fire;		
2.4.	Practical tasks: <ul style="list-style-type: none"> • First aid in case of shock; • First aid to a victim of first and second degree burns; • First aid in case of damage from smoke inhalation; 		
2.5.	Types of bleeding and techniques for applying a temporary hemostatic dressing. Massive external bleeding. The most common burn injuries. Practical task for hemostatic dressing.		
2.6.	Providing pre-medical care, self-help and mutual aid for fractures of limbs, injuries of the head, spine, chest and abdomen. Practical tasks - immobilization of limbs, head and spinal cord.		
2.7.	Action in case of poisoning.		
2.8.	Types of carrying and transportation of the victim.		

Expected results:

1. The acquired knowledge, the formed skills and competencies in the training are the necessary basis for survival during a forest fire;
2. Acquisition of theoretical - practical knowledge and skills, enabling adequate response to disasters and crises;
3. Acquired skills and competencies to take the right actions to save from a forest fire;
4. Providing of first psychological help and support to people in case of danger of forest fires;
5. Acquired skills for providing first aid to a victim in shock, unconsciousness, and burns;
6. Knowledge on the types of bleeding and techniques for placing a temporary haemostatic bandage;
7. Knowledge on the techniques for helping fractures of limbs, injuries of the head, spinal cord, chest and abdomen;
8. Providing of first aid for burn injuries;
9. Able to take the right action in case of poisoning;
10. Knowledge on the correct carrying and transportation of the victim.

Use of training methods and techniques:

- story; explanation; demonstration of action; visualization; observation; comparison; discourse (conversation); associations; group work; role games.

Visual aids and didactic materials:

- presentations, photos; backgammon; models; sound signals, family disaster response plan.

Cross-curricular links:

- **Vocational training disciplines (forestry; forest legislation; forest protection, etc.)** - use of knowledge and practical skills for protection of forest territories (forests), including the danger of using forest firefighters; knowledge of forest legislation and regulations in this direction; collects information from various sources - textbooks, encyclopedias, movies and the Internet; organizing and working in a group; shares personal experience and experiences; comparison and selection of appropriate presentation models.
- **Healthy and safe working conditions** - professional competencies for risk assessment of the working environment, for ensuring healthy and safe working conditions in various activities; knowledge and skills for assessing the risks of the working environment, for taking preventive measures to avoid and eliminate them, for ensuring the protection of life, health and

working capacity; assessment of the fire danger of the sites; performing primary pre-medical care.

- **Bulgarian language and literature**- develops cognitive, communicative and practical skills such as recognizing, comparing, using different sources of information; reads and transmits popular science text; presents information from own research through various forms - textual, schematic.
- **Biology and health education** - learns hygiene rules and skills how to take care of the health; develops cognitive, communicative and practical skills such as recognizing, comparing, using different sources of information, teamwork skills, promoting communication.
- **Chemistry and environmental protection**- knowledge of the processes of combustion, toxicity, etc.
- **Equipment requirements:**
 - Theory training is carried out in a classroom. The furniture includes: a workplace for each student /desk and chair/and for the teacher, white or black blackboard, appropriate furniture, presentation equipment, auxiliary materials, drawings, diagrams, maps and other visual aids.
 - The practical classes are held in suitable premises, basic sites or outdoors. The premises must be equipped with furniture and materials - diagrams, models, sanitary bag / first aid kit, personal safety equipment - disposable gloves, triangular towels and bandages for exercises for making bandages, blankets /mats for demonstration and placing the mannequin to reclining, mannequins for demonstration of cardio-pulmonary resuscitation, training pad for cardio-pulmonary resuscitation.

References and sources:

Disaster Protection Act; Ordinance № 8 of 11 May 2012 on the terms and conditions for protection of forest areas from fires; Training aids on Forest Protection, Forestry and Health and Safety; Rules for conduct and action in case of forest fires of the General Directorate "Fire Safety and Protection of the Population" (GDPBZN) at the Ministry of Interior (Mol); 2006 draft law on volunteering; internet sources.

Drafted by: HristinaHristova